



Robert Wood Johnson Foundation

RWJF Retrospective Series

Social Norms and Attitudes About Smoking

1991–2010

Center for
Public Program Evaluation

April 2011

A companion report to
*The Tobacco Campaigns of the
Robert Wood Johnson Foundation
and Collaborators, 1991–2010*

About This Paper

This report reviews changes in social norms and attitudes about tobacco use, as reported in national or large-scale surveys (from multiple states or in a single state such as California), and the parallel evolution of programs supported by the Robert Wood Johnson Foundation and its collaborators to strengthen the tobacco-control infrastructure.

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Companion Reports in this RWJF Tobacco Retrospective Series

The Tobacco Campaigns of the Robert Wood Johnson Foundation and Collaborators, 1991–2010

- Smoking in Movies and Television: Research Highlights
- Clearing the Air: An Overview of Smoke-Free Air Laws
- More Than a Decade of Helping Smokers Quit: RWJF's Investment in Tobacco Cessation
- The Impact of Tax and Smoke-Free Air Policy Changes
- RWJF's Tobacco Work: Major Programs, Strategies and Focus Areas
- Major Tobacco-Related Events in the United States
- Surgeon General's Reports on Tobacco
- The Way We Were: Tobacco Ads Through the Years
- Tobacco-Control Work, 1991–2010: RWJF and Collaborators Slideshow
- IMPACT: Smokers and Smoking-Related Deaths Slideshow

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Preface

Twenty years ago the Robert Wood Johnson Foundation decided to put our name and substantial financial and human resources behind a bold initiative to reduce tobacco use in this country. For two decades, RWJF has been working with partners in government, education, philanthropy and the private sector to make literally the air that we breathe safe to inhale and to free many Americans from a gripping, destructive addiction to which they were seduced in their youth. As this retrospective indicates, our tobacco-control campaigns often have seemed an uphill battle, but they have made significant inroads against the harmful effects of tobacco.

Because of that significant progress, we have scaled back our investments in tobacco control to allow us to focus on new public health challenges. Yet the moral injunction of medicine is “First, do no harm.” As we wound down these investments (though ongoing, we are still providing \$3,589,258 to reduce tobacco use), I was adamant that we needed to monitor the state of tobacco control going forward and to assess the legacy and impact of our body of tobacco-control work.

As we address other critical public health challenges, like the need to roll back the epidemic of childhood obesity, it is important to harvest lessons that can be learned from our tobacco-control work, which has been unique in terms of magnitude, duration, scope and methods. We therefore asked the Center for Public Program Evaluation to conduct an independent assessment to help us and the field understand the results of our efforts, what worked, what didn’t, and what could be adopted or adapted to fulfill our mission to improve and make a demonstrable difference in health and health care for all Americans.

I wish to emphasize our insistence that the center’s work be truly independent. The center’s president, George Grob, is a former Deputy Inspector General of the U.S. Department of Health and Human Services, who personally took charge of this assessment. Grob asked Henry Aaron, Bruce and Virginia MacLaury, senior fellow and former director of economic studies at the Brookings Institution, and Michael O’Grady, senior fellow at the National Opinion Research Center and principal, O’Grady Health Policy, to provide an additional layer of independent review. Aaron and O’Grady advised on study methods and findings, and reviewed draft reports. The resulting assessment report describes both the significance and limits of RWJF’s contributions and achievements.

I want to thank the many individuals and organizations—often working in collaboration—who conducted the tobacco-control campaigns, and I especially want to thank the many RWJF staff members (and former staff) who have worked with such competence and endurance on reducing Americans’ addiction to tobacco. Among them were: Diane Barker, Michael Beachler, Sallie Petrucci George, Karen Gerlach, Marjorie Gutman, Robert Hughes, Nancy Kaufman, Jim Knickman, Michelle Larkin, Joe Marx, Tracy Orleans, Marjorie Paloma and Steven Schroeder, and many others behind the scenes and too numerous to name.

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Social Norms and Attitudes About Smoking, 1991–2010

While social norms and attitudes are hard to measure, and their influence on policy change and individual behavior difficult to prove, they most likely played an important role in the sea change that occurred in tobacco control and smoking behavior during the latter half of the 20th century. One hypothesis is that social norms and attitudes have an interactive relationship with policy change (Walsh, 1981; Kingdon, 1984). Because policy-makers are sensitive to public sentiment, policy change seems more likely to occur when the public has a negative view of a risky health behavior and generally favors a particular policy option.

Instituting even an unpopular policy may decrease a risky health behavior and eventually alter social norms and attitudes. Seat belt use is an example of this bidirectional relationship.

However, instituting even an unpopular policy may decrease a risky health behavior and eventually alter social norms and attitudes. Seat belt use is an example of this bidirectional relationship. Seat belts were not especially popular when they were first mandated by the U.S. Department of Transportation in 1984 and many people resented having to buckle up every time they got into a car. Nevertheless, auto manufacturers complied with the law by installing seat belts, and many people began to use them. Several years after the law went into effect, seat belt use increased, as did positive attitudes about them, bolstered perhaps by evidence confirming the number of lives they saved.

At the individual level, trends in social norms and attitudes about smoking often correlate with shifts in behavior, although a causal relationship has not been established empirically (Warner, 2005; Petraitis and Flay, 1995). One theoretical perspective suggests that both risk and protective factors, which include social norms and perceptions, influence cigarette smoking among youth (Hawkins, Catalano and Miller, 1992; Hawkins et al, 1985). These factors derive from circumstances, influences and perceptions at the individual, peer, family, school, community and societal levels. At the individual level among adolescents, sensation-seeking, perceptions of risk, perceptions of social approval of cigarettes, bonding with school and school performance, and bonding with family are all potential influences on the likelihood of substance use.

METHODS

For the findings reported here, researchers searched more than 20 surveys, studies and other sources of nationally representative data on attitudes and norms toward smoking among youth and adults (see [Appendix 1](#)).

Three national surveys were found that included results on social norms and attitudes toward smoking, all three of them addressing areas related to youth attitudes and norms, and two related to adults:

- Monitoring the Future (MTF), supported by the National Institute on Drug Abuse (NIDA) and conducted by investigators at the University of Michigan, among middle school and high school students, measured:
 - Perceived risk of cigarette use
 - Disapproval of smoking
 - Availability of cigarettes
 - Perceived risk in using smokeless tobacco
 - Disapproval of smokeless tobacco
- National Household Survey on Drug Use and Health (NHSDUH)—supported by the Substance Abuse and Mental Health Services Administration—among youth, ages 12 to 17¹ measured:
 - Perceived risk of cigarette use
- Tobacco Supplement to Current Population Survey ([Appendix 2](#)), conducted by the U.S. Census Bureau among adults ages 16 and older, measured:
 - Attitudes toward smoking bans in public places
 - Attitudes toward limits on advertising tobacco products²

¹ NHSDUH sample consists of two groups: youth (12–17 years) and adults (18 and older). Results on attitudes and perception were found only for youth.

² We were not able to find a summary of these results, nor access them to compile trends.

RESULTS: TRENDS IN SOCIAL NORMS AND ATTITUDES

Based on the limited available data, youth and adult attitudes toward tobacco use seem to have grown steadily more negative since the 1970s, approximately paralleling the decrease in rates of youth smoking.

Youth Attitudes

Overall, youth developed more negative views about the use of cigarettes and smokeless tobacco from the mid-1970s through the 1990s, although there was a considerable “backslide” in the early 1990s. With that exception, the perception that using cigarettes or smokeless tobacco carried “great risk” increased steadily over time, as did disapproval of tobacco use, while perceived availability of cigarettes decreased.

The increasingly negative trend in youth attitudes appeared to reflect a broader societal shift among adults and policy-makers in tandem with a series of Surgeon General’s reports beginning in 1964, and other major policy and legal developments. It is not, of course, possible to know whether the reversal in youth attitudes and perceptions that occurred in the early 1990s would have continued without the concerted action and programs of the Robert Wood Johnson Foundation and its collaborators.

Perceived Risk of Cigarettes or Smokeless Tobacco Use

Two national surveys examined youth perception of tobacco use (MTF and NHSDUH). Every year, Monitoring the Future examines substance use and attitudes among middle school and high school students (grades 8, 10 and 12) in a nationally representative sample of schools. NHSDUH measures substance use and attitudes/risk factors in a household sample of adolescents (ages 12 to 17) and adults (ages 18 and older).

Both surveys found increases in youth perception of “great risk” in smoking regularly (one pack or more per day) and using smokeless tobacco over the past three decades, as seen in Figures 1, 3 and 7. MTF data show a steady increase from 1976 to 2008 among 12th graders, from a low of approximately 50 percent to a high of 75 percent perceiving “great risk” (Figure 3), with a dip from 1993 to 1996. There was a similar increase in the perception of great risk among 8th and 10th graders from 1990 to 2008, from the 55 percent to 60 percent range to the 60 percent to 70 percent range (prior to 1990, MTF surveyed only 12th graders). The trend in the perception of risk from using smokeless tobacco parallels the trend in smoking cigarettes (Figure 7). Reinforcing the MTF findings, NHSDUH data show a fairly steady increase in perception of “great risk” from smoking, from a low of 60.7 percent in 1999 to a high of 68.8 percent in 2007 (Figure 1).

Disapproval of Smoking

Monitoring the Future was the only national survey to examine youth disapproval of tobacco use (Figures 4 and 8). Among 12th graders, disapproval of smoking increased somewhat steadily from 1976 to 2008, from a low of approximately 68 percent to a high of 80 percent, taking a major dip from 1993 to 1996 before rising again. Disapproval of smoking among younger students (8th and 10th graders) followed a parallel trend from 1992 to 2008, as did disapproval of use of smokeless tobacco. (Figure 8; smokeless tobacco data are available from 1990 to 2008 and are limited to 8th and 10th graders.)

Availability of Cigarettes

Monitoring the Future was the only national survey to examine youth perceptions of the availability of cigarettes (Figure 5). Among 8th and 10th graders, those who said it was “fairly easy” or “very easy” to obtain cigarettes was at a plateau of approximately 80 percent (8th graders) and 90 percent (10th graders) from 1990 to 1996, then dropped steadily to 58 percent (8th graders) and 78 percent (10th graders) in 2008. (12th graders were not asked about the availability of cigarettes.)

Adult Attitudes Toward Smoking Bans in Public Places

The Tobacco Supplement to the Current Population Survey provides the only longitudinal trends on adult attitudes toward smoking and social norms, as measured by views of smoking bans in public places during the 1990s (Figure 10). Support increased steadily from 1992 to 2007 for bans on smoking in restaurants (from 45 percent to 64 percent), bars (24 percent to 44 percent) and sports arenas (67 percent to 79 percent).

Depiction of Smoking in the Entertainment Media

Media depiction of unhealthy behavior, such as smoking or violence, can be an indicator of prevailing societal norms, although there has been extensive debate over whether it drives that behavior or reflects it or both. Despite concerted effort by advocates and the World Health Organization (WHO) during the 1990s and the first decade of the 21st century to encourage the entertainment industry to enact and enforce policies restricting the depiction of smoking in movies, only small steps were taken. However, studies did show a shift in the blockbuster movies likely to attract young viewers—in 1990, hit movies had an average of 3.5 smoking scenes, compared to an average of 0.23 scenes in 2007.

For more on related trends, see “Smoking in Movies and Television,” a background paper prepared as part of the Center for Public Program Evaluation’s assessment of the Robert Wood Johnson Foundation’s contribution to tobacco control.

THE SHIFTING TOBACCO LANDSCAPE

A series of policy, legal and cultural developments over the past few decades have coincided with shifting attitudes and social norms related to tobacco. The Surgeon General’s Report of 1964 first alerted the public to the potential harm from smoking tobacco and is credited with stimulating initial anti-smoking efforts in the United States. Among the major developments occurring in subsequent years were:

- Education/information
 - Surgeon General issues a series of reports on smoking.
 - Warning labels are required on cigarette packages.
- Legal action
 - Private lawsuits are filed against the tobacco industry by former smokers or their families.
 - State attorneys general sue tobacco companies to recover Medicaid costs for morbidity attributable to tobacco.
- Extensive tobacco industry deceit is exposed.
- Policies
 - Increases in cigarette excise taxes are enacted by states and eventually by the federal government.
 - Advertising and promotion of tobacco products are restricted.
 - FDA attempts to regulate tobacco as a drug.
 - Smoking is banned or restricted in public places.
 - Legislation is enacted to increase enforcement of restrictions on availability of smoking products to minors.
 - Comprehensive statewide tobacco-control programs are enacted.

Observers of tobacco and health consider the 1964 landmark Surgeon General's report the beginning of the national anti-smoking campaign.

In all likelihood, some combination of these and other education/information, legal and policy developments interacted with public attitudes, norms and behavior change. For example, information about the harms associated with smoking or secondhand smoke exposure, including media coverage, may have increased perceptions of risk and harm, eventually leading to the adoption of new policies. These policies, in turn, may have reduced cigarette smoking and fostered more negative social norms about smoking, and more positive attitudes toward even stricter policies, such as workplace smoking bans.

Brief summaries of key developments are offered here to promote an understanding of how they may have interacted with attitudes toward tobacco and shifts in social norms. This work draws heavily on Kenneth E. Warner's excellent summary of tobacco policy research and its contributions to public health policy (Warner, 2005).

Education/Information

Observers of tobacco and health consider the 1964 landmark Surgeon General's report the beginning of the national anti-smoking campaign. As mandated by Congress, the Public Health Service has since published more than two dozen Surgeon Generals' reports on cigarette smoking. There is a widespread consensus that these reports, and the publicity surrounding their release, informed the public about the dangers of smoking and contributed to the sea change in public attitudes and behavior over the past several decades.

One study affirms an impact of the first Surgeon General's report on smoking rates (Warner, 1977; Warner, 1981; U.S. Department of Health and Human Services, 1986). While other empirical evidence about the impact of these reports on smoking behavior is limited, educating the public was certainly the core of the anti-smoking movement for a decade after the first Surgeon General's report. Congress first required warning labels on cigarette packs in 1965 and further strengthened requirements in 1967 and 1972. Information about the health effects of secondhand smoke, published in Surgeon General reports and other materials in the 1980s, arguably paved the way for bans or restrictions on smoking in public places.

State Attorneys General Sue the Tobacco Industry/Master Settlement Agreement

As their Medicaid costs skyrocketed in the 1970s and 1980s, states seeking to rein in spending became more aware of the costs of tobacco-related disease on their Medicaid programs, a recognition fueled and confirmed by cost-estimate studies in several states. One state attorney general, eventually joined by others, took the unprecedented step of filing lawsuits against the major tobacco companies to recover their Medicaid costs. These lawsuits wound slowly through the court system, leading to out-of-court negotiations that resulted in the 1998 Master Settlement Agreement (MSA) between the states and the major tobacco companies.

Through the complex and multifaceted MSA, tobacco companies agreed to specific restrictions on the marketing and placement of tobacco products, on a formula and process for compensating the states that could amount to millions of dollars per year, and to the establishment of the American Legacy Foundation to promote prevention and research. Among the limits it imposed on tobacco companies, the MSA:

- Banned the use of cartoons in advertising (such as Joe Camel).
- Dissolved the Tobacco Institute, tobacco industry trade group.
- Eliminated outdoor advertising and transit advertisements.
- Banned tobacco brand name merchandise.
- Limited tobacco brand name sponsorship of concerts, athletic events, events with an audience that has a significant percentage of youth (e.g., rock concerts) and events in which participants or contestants are youth.
- Banned the placement of tobacco products as props in entertainment media and video games.

Policies to Restrict Advertising and Promotion of Tobacco Products

The first, and still the most dramatic, restriction on the advertising and promotion of smoking products was the voluntary ban on cigarette advertisements on television instituted in 1969. Since then, advocates and policy-makers have made steady efforts to restrict or ban advertisements and other cigarette promotions, especially to children and youth, as noted above. Numerous studies have found a strong positive correlation between children's interest in cigarette ads and promotional items, and their plans to experiment with smoking. The impact of the Joe Camel marketing campaign of the early to mid-1990s is particularly well documented. However, empirical evidence of a direct causal relationship between advertising/promotion and smoking is difficult to obtain for technical reasons.

Numerous studies have found a strong positive correlation between children's interest in cigarette ads and promotional items, and their plans to experiment with smoking.

Empirical evidence of a causal relationship between counteradvertising campaigns (typically sponsored by states) and attitudes and behavior is also difficult to generate, although recent research concluded that a major youth-oriented media campaign, dubbed the Truth Campaign, effectively drew the attention of its intended audience (ages 12 to 17) and altered attitudes toward future smoking. One study also found a dose-response effect: The more children were exposed to the Truth Campaign, the less likely they were to smoke (Farrelly et al, 2005). During the 1990s, California and Massachusetts, the two states most prominently engaged in comprehensive tobacco-control programs, also implemented major counteradvertising campaigns.

FDA Tries to Assert Jurisdiction Over Nicotine Products

By 1993, the idea of the U.S. Food and Drug Administration (FDA) regulating tobacco as a drug was under discussion in some policy circles and in 1995, the FDA proposed strict regulations. During the federally mandated comment process that is part of finalizing a new regulation, hundreds of tobacco industry documents, newly available for public scrutiny via private lawsuits, were analyzed and delivered to the FDA on behalf of public health organizations. In 1996 the FDA issued a final rule declaring that tobacco was, in fact, a drug and should be regulated. A long period of tobacco industry court challenges followed, culminating in a 1993 Supreme Court decision that FDA lacked regulatory authority over tobacco. More than a decade later, in 2009, Congress gave the FDA that authority through the Family Smoking Prevention and

Tobacco Control Act. This legislation also imposed further restrictions on tobacco marketing and advertising, allowing the Secretary of Health and Human Services to alter cigarette package label requirements to promote greater understanding of the risks associated with tobacco, and the states and localities to restrict the time, place and manner of cigarette advertising and promotion, although not the content of those ads.

Although the public may not have followed every twist of this long battle, the media coverage of the industry documents and the debate about whether tobacco was a drug probably influenced public attitudes and social norms. In particular, the FDA documented its claim of regulatory authority over tobacco with industry materials describing the purposeful manipulation of nicotine in cigarettes and other products. Industry documents also quoted industry-paid scientists describing the impact of nicotine in lab animals and human beings, and directly refuted the claim made by the same industry over many decades that nicotine was not addictive. These documents fueled an outcry from the public and tobacco-control advocates over industry deceit, especially in the telling moment when they were juxtaposed with the sight of seven industry CEOs testifying before Congress that they did not believe nicotine was addictive.

Banning or Restricting Smoking in Public Places

Legal restrictions on smoking in public places date from the early 1970s, when the first state clean indoor air laws were passed. Since then, and accelerating in the 1990s, nearly all states and a large number of cities and counties, have restricted or banned smoking in a range of indoor spaces, and the health of nonsmokers has been the pre-eminent concern. An early policy was a ban on smoking on all domestic airline flights, instituted in 1990.

As evidence grew about the physical harms of secondhand smoke, a non-smokers' rights movement arose in the 1990s. The American Nonsmokers' Rights Foundation estimated that as of October 2009, slightly more than half (57%) of the U.S. population was covered by 100 percent smoke-free workplace restrictions. As of December 31, 2009, 21 states and the District of Columbia had eliminated smoking in bars, restaurants, government worksites and private worksites. One study concluded that during 1998–1999, 69 percent of all U.S. workers employed outside the home (but working indoors) were employed in smoke-free workplaces as a result of either laws or company policies. One explanation for the rapid, widespread increase in smoking bans in public places is the empirical evidence that they not only protect nonsmokers from exposure but also stimulate smokers to quit at higher rates than smokers who work in places where smoking is allowed.

For more on these trends, see *The Impact of Tax and Smoke-Free Air Policy Changes* and *Clearing the Air: An Overview of Smoke-Free Air Laws*, two background reports prepared as part of the Center for Public Program Evaluation's assessment of the Robert Wood Johnson Foundation's contribution to tobacco control.

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**ROBERT WOOD JOHNSON FOUNDATION ACTIVITIES
TO SHIFT SOCIAL NORMS AND ATTITUDES ABOUT TOBACCO**

While most Robert Wood Johnson Foundation (RWJF) programs aim to change social norms and attitudes toward tobacco to some degree, a few had that as an explicit aim, especially among youth, while most had a secondary focus on social norms as part of a larger effort to influence policy and behavior.

Programs Directly Focused on Social Norms and Attitudes

A few RWJF programs directly and centrally aimed to alter social norms and attitudes so that tobacco became less favorable, especially among youth.

PRISM Awards[™] (\$8.1 million, 1998–2005): These awards recognize the accurate depiction of alcohol, tobacco and drug abuse and addiction in feature films, television, music, comics and other entertainment media. The awards are given annually by the Entertainment Industries Council and the National Institute on Drug Abuse to encourage accurate depiction of substance abuse and addiction in the entertainment media. RWJF also supported an *Innovators Combating Substance Abuse* award with the aim to educate the entertainment industry about the harm of depicting smoking in movies, as well as several studies of how portrayals of tobacco use in the media influence youth smoking.

Evaluation of the “Take Charge of Your Life” School-Based Substance Abuse Prevention Curriculum (\$13.7 million, 2001–2009): In February 2001, RWJF awarded a grant to the Institute of Health and Social Policy at the University of Akron to develop and test the Take Charge of Your Life (TCYL) curriculum, to be disseminated through the D.A.R.E. delivery system in schools. The intent of the pilot was to provide students with the communication, decision-making, assertiveness and refusal skills they need to act on their desire not to use tobacco, alcohol and illicit drugs. The program also aimed to help middle school students understand the personal, social and legal risks and consequences of using these substances.

The impetus for this initiative was the widespread growth of the D.A.R.E. delivery system in secondary schools, coupled with credible evidence that the D.A.R.E. curriculum itself was not effective (e.g., Clayton et al., 1991). A national randomized controlled trial of the TCYL curriculum was conducted with students from six metropolitan areas, where 83 school clusters were randomly assigned to either the TCYL program or the control group. The TCYL coursework had a positive impact on students considered “high risk” (those who began using marijuana in their early teens, before or by 7th grade). There was also a significant negative finding: a 3 percent to 4 percent increase in alcohol and cigarette use among 11th graders who had not used either substance when they began the study in 7th grade.

Programs With Secondary Focus on Social Norms and Attitudes

Most RWJF programs that aimed to change tobacco-control policy focused on stimulating and nurturing advocacy efforts and public support. Communications to win over policy-makers and the public was a major part of the policy change strategy, with messages disseminated nationally by RWJF or the Center for Tobacco-Free Kids and often on a state and local level by advocates.

Smokeless States[®]: *National Tobacco Policy Initiative* (\$103.5 million, 1994–2004) is a prime example of a secondary focus on social norms and attitudes as part of a larger attempt to shift policy. For example, the Center for Tobacco-Free Kids developed the message that increasing state excise taxes on cigarettes had dual benefits: with a single action, states could reduce smoking rates, especially among teens, and improve public health while also bolstering their financial picture. The center developed national campaigns to disseminate this message and assisted state coalitions and others to spread the word at the state and local levels. The Center for Tobacco-Free Kids also monitored public attitudes toward increasing excise taxes at the national and state level, or assisted state coalitions to do so, since this could influence policy-makers.

The National Spit Tobacco Education Program (\$10.7 million, 1996–2005) was another national program with the secondary aim of shifting social norms and attitudes. RWJF partnered with Oral Health America to engage major league baseball players in decreasing their own use of spit tobacco, and more broadly its use by youth and the public. The premise was that the widespread use of spit or smokeless tobacco by major league baseball players “normalized” or “glamorized” its use, especially among young people who looked up to professional athletes. All 28 major league teams were involved in the program, which was built on the work and leadership of Joe Garagiola, a former major leaguer, television broadcaster and recognized ambassador for baseball.

Other RWJF programs to promote advocacy for policy change include: Campaign for Tobacco-Free Kids (formerly the Center for Tobacco-Free Kids), Enhancing Minority Organizations in Tobacco Control, and establishment of an Institute for Advocacy on Environmental Tobacco Smoke.

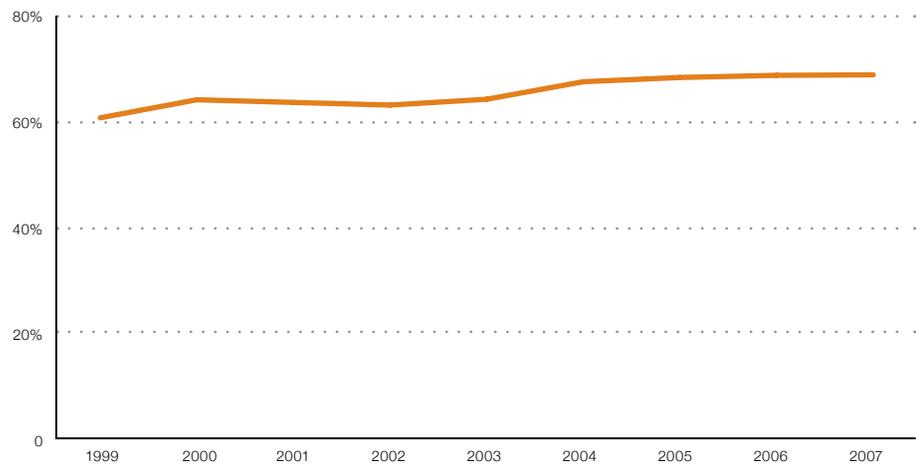
CONCLUSIONS

Changes in attitudes and norms toward tobacco use have in all likelihood been part of the combination of factors resulting in the overall decrease in smoking during the past few decades and RWJF investments have probably contributed to this dynamic. Based on the limited available data, youth and adult attitudes toward tobacco use have grown steadily more negative since the 1970s, approximately paralleling a series of major policy, legal and cultural developments, and the overall decrease in rates of youth and adult smoking.

RWJF programs and activities aimed either primarily, or more often secondarily, at shifting social norms and attitudes toward tobacco may have contributed to the overall decrease in norms favorable to smoking during this period, particularly among youth. This was accomplished by supporting youth anti-smoking communication campaigns, influencing the mass media or sports in their portrayal of tobacco products, or, more indirectly, by increasing public support for and passage of tobacco-control policies.

FIGURE 1

**Perceived Great Risk of Cigarette Use* Among Youths
Ages 12 to 17, 1999–2007**



*Use = One or more pack per day

Source: National Household Survey on Drug Abuse, Substance Abuse and Mental Health Services Administration

SOCIAL NORMS AND ATTITUDES ABOUT SMOKING

Cigarette Trends in 30-Day Use, Risk, Disapproval, and Availability

- 8th Grade
- 10th Grade
- 12th Grade

FIGURE 2
Percentage who used in the last 30 days

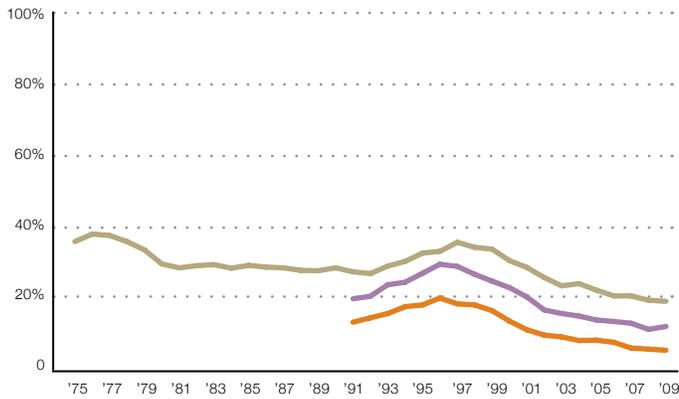


FIGURE 3
Percentage seeing "great risk" in smoking a pack or more per day

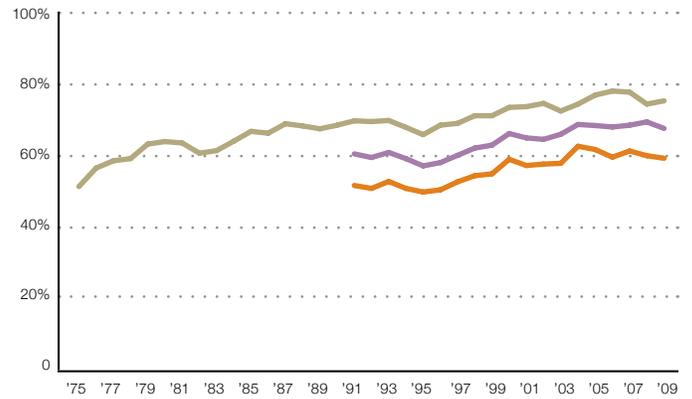


FIGURE 4
Percentage disapproving of smoking a pack or more per day

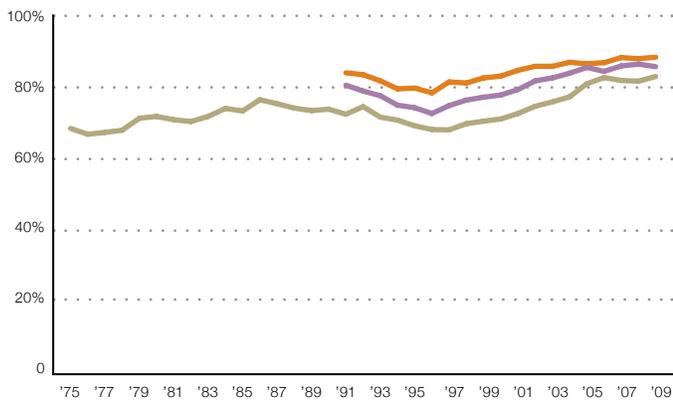
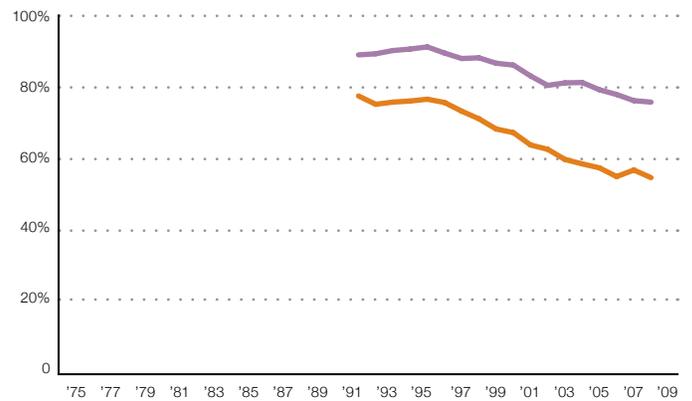


FIGURE 5
Percentage saying "fairly easy" or "very easy" to get

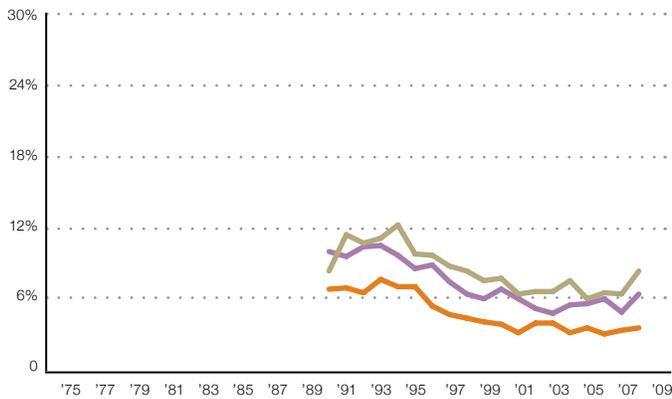


Source: The Monitoring the Future study, the University of Michigan

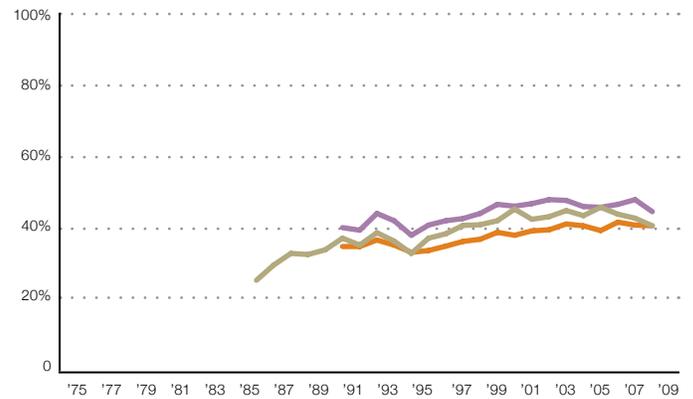
Smokeless Tobacco: Trends in 30-Day Use, Risk, and Disapproval

- 8th Grade
- 10th Grade
- 12th Grade

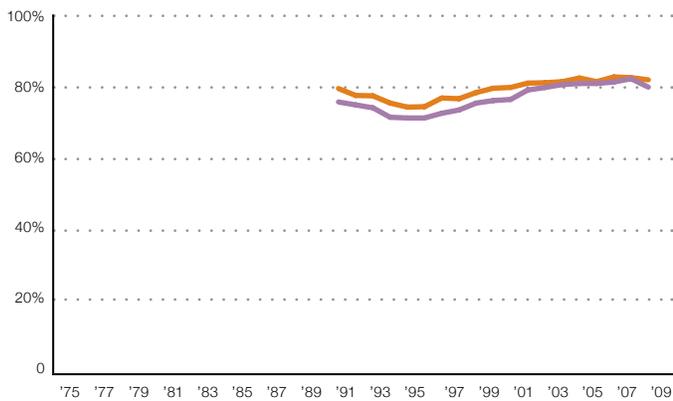
**FIGURE 6
Percentage who used in the last 30 days**



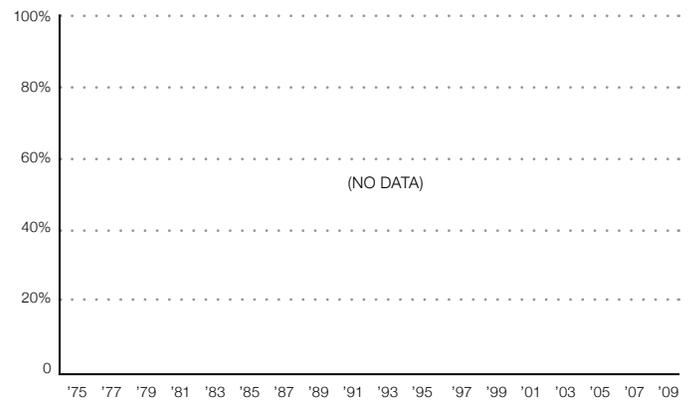
**FIGURE 7
Percentage seeing “great risk” in using regularly**



**FIGURE 8
Percentage disapproving of using regularly**



**FIGURE 9
Percentage saying “fairly easy” or “very easy” to get**

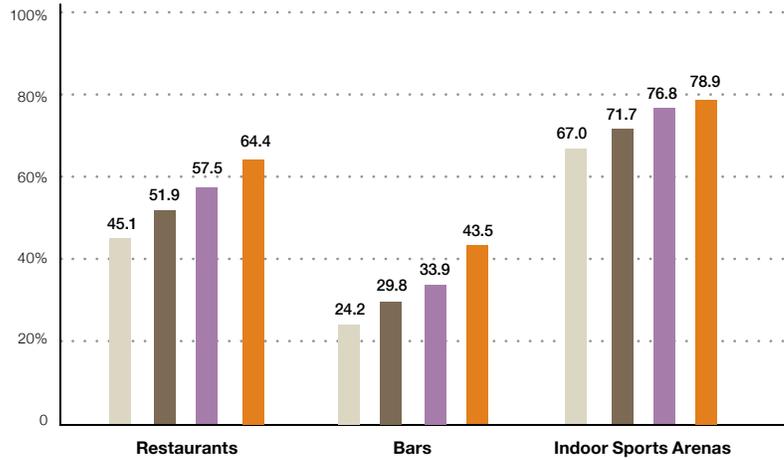


Source: The Monitoring the Future study, the University of Michigan

FIGURE 10

**Percentage of Respondents Supporting Smoking Bans
in Public Places**

■ 1992-1993 ■ 2001-2002
■ 1998-1999 ■ 2006-2007



Source: U.S. Department of Commerce, Census Bureau, National Cancer Institute
Sponsored Tobacco Use Supplements to the Current Population Survey

Appendix 1

Social Norms and Attitudes Toward Smoking

Survey and Research Websites Searched
for National Trends, 1990 to 2008

SITES WITH RELEVANT RESULTS

Monitoring the Future Surveys (www.monitoringthefuture.org): Measures perceived risk of cigarette use; disapproval of smoking; availability of cigarettes; perceived risk in using smokeless tobacco; and disapproval of smokeless tobacco among middle school and high school students.

National Household Survey on Drug Use and Health (www.oas.samhsa.gov/nsduh): Measures tobacco use/prevalence estimates and risk perceptions among youth (ages 12 to 17).

Tobacco Use Supplements to Current Population Survey (www.tobaccocontrol.bmj.com): Changes in norms among adults about where smoking should not be allowed at all, in both California and elsewhere in the United States. Participants were asked about restaurants, hospitals, work areas, bars, indoor sports venues and indoor shopping malls.

SITES WITHOUT RELEVANT RESULTS

Centers for Disease Control and Prevention Web pages

Healthy Youth! (CDC) Tobacco Use (www.cdc.gov/healthyouth/tobacco/index.htm)

Healthy Youth! Tobacco Use Fact Sheets—Percentage of High School Students Who Smoke, State by State (www.cdc.gov/healthyouth/tobacco/state-facts.htm)

Youth Risk Behavior Surveillance (www.cdc.gov/yrbss): Trends in Prevalence of Tobacco Use (Fact Sheet)

Behavior Risk Factor Surveillance System (www.cdc.gov/brfss): Prevalence and Trends Data and Smoking Status for Youth

National Health Interview Survey (www.cdc.gov/nchs/nhis): Smoking Rates for Adults

National Health and Nutrition Examination Survey (www.cdc.gov/nchs/nhanes): Mostly diet-related questions

Morbidity and Mortality Weekly Report (www.cdc.gov/mmwr): Health Objectives for the Nation: Public Attitudes Regarding Limits on Public Smoking and Regulation of Tobacco Sales and Advertising—10 U.S. Communities, 1989. Also: Discomfort From Environmental Tobacco Smoke Among Employees at Worksites With Minimal Smoking Restrictions, 1988.

Preventing Chronic Disease (www.cdc.gov/pcd): The Impact of a Communitywide Smoke-Free Ordinance on Smoking Among Older Adults—Clean Air And Smoke-Free Ordinances and Their Effects on Smoking Prevalence Among Older Adults.

Surgeon General’s Reports on Smoking and Tobacco Use (www.cdc.gov/tobacco/data_statistics/sgr/index): Tables, charts and graphs, mostly on prevalence of current smoking, frequency distributions of current smoking status, deaths attributed to smoking, trends of current smoking, etc. Also reviewed 2000 report on reducing tobacco use, which is primarily about smoking rates in adults and teens.

Other Websites

Social Science Research Center (www.ssrc.msstate.edu): A single study from Mississippi State University about attitudes toward smoking in the movies.

Gallup Polls (www.gallup.com/poll): A single snapshot study of perception of well-being among nonsmokers versus smokers (2008–2009).

National Youth Tobacco Survey (NYTS) (www.legacyforhealth.org): Mostly tobacco policies of cities and smoking rates.

Current Population Survey (CPS) (www.census.gov): Health coverage and insurance; tobacco (smoking as form of drug use, birthweight by smoking versus nonsmoking mothers).

Social Marketing Institute (www.social-marketing.org): Success stories; Florida Truth Campaign; data on cigarette use and campaign awareness.

Health Education Research (<http://her.oxfordjournals.org>): A single study on whether local tobacco regulations influence perceived smoking norms among adult and youth in Massachusetts.

Community Trial for Smoking Cessation (COMMIT): Changes in community attitudes toward cigarette smoking, 1989 and 1993 surveys.

American Journal of Preventive Medicine ([www.ajpm-online.net/article/S0749-3797\(03\)00116-8/abstract](http://www.ajpm-online.net/article/S0749-3797(03)00116-8/abstract)): A single study of adolescent smoking behavior including measures of social norms—data from 14 rural Minnesota communities.

Pew Social and Demographic Trends (<http://pewsocialtrends.org/pubs/732/smoking-stress-quitting>): Smokers can’t blow off stress.

All Academic Inc. (www.allacademic.com): A single study examining antecedents of smoking attitudes and subjective norms and adolescent smoking behavior and how these have been used to develop anti-smoking campaigns.

Americans for Nonsmokers’ Rights (www.no-smoke.org): Tobacco Industry tracking database—mainly tobacco policy issues in the United States.

Appendix 2

Tobacco Supplement to Current Population Survey

Questions About Attitudes and
Perceptions Toward Smoking Policies

The Tobacco Supplement to the Current Population Survey, conducted by the U.S. Census Bureau, examined attitudes among adults toward smoking in public places, collecting the following information (with slight variations in some of the questions over time):

- Attitude toward smoking being allowed in public areas (restaurants, hospitals, indoor work areas, bars and cocktail lounges, indoor sporting events, indoor shopping malls) (1992–2007)
- Norms/rules about smoking in one's own home (1992–2007)
- Availability of cigarettes and other tobacco products to minors (1992–2002)
- Attitude toward tobacco-free promotions (1992–1999)
- Attitude toward advertising tobacco products (1992–2002)

The remainder of Appendix 2 summarizes the survey questions asked over time.

QUESTION 1

I am going to read you a list of places. In *(place)* do you think that smoking should be allowed in all areas, in some areas or not allowed at all? (Restaurants; Hospitals; Indoor work areas; Bars and cocktail lounges; Indoor sporting events; Indoor shopping malls)

- **Allowed in all areas**
- **Allowed in some areas**
- **Not allowed at all**

Supplement Questionnaire: Sept. 1992

Current Population Survey: Sept. 1992; Tobacco Use Supplement File [Q #72]

Supplement Questionnaire: Jan. 1993

Current Population Survey: Jan. 1993; Tobacco Use Supplement File [Q #72]

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Sept. 1995; Tobacco Use Supplement File [Q #S72]

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Jan. 1996; Tobacco Use Supplement File [Q #S72]

(Note: Same Supplement Questionnaire as Sept. 1995)

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Sept. 1998; Tobacco Use Supplement File [Q #S72]

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Jan. 1999; Tobacco Use Supplement File [Q #S72]

(Note: Same Supplement Questionnaire as Sept. 1998)

Supplement Questionnaire: June 2001, Nov. 2001 and Feb. 2002

Current Population Survey: June 2001, Nov. 2001 and Feb. 2002; Tobacco Use Supplement File [Q #S72]

QUESTION 1A

In bars and cocktail lounges, do you THINK that smoking SHOULD be allowed in all areas, allowed in some areas, or not allowed at all?

- **Allowed in all areas**
- **Allowed in some areas**
- **Not allowed at all**

Supplement Questionnaire: Feb., June and Nov. 2003

Current Population Survey: Feb., June and Nov. 2003; Tobacco Use Supplement File [Q #K5]

QUESTION 1B

In *(place)* do you THINK that smoking SHOULD be allowed in all areas, in some areas or not allowed at all? (Restaurants; Indoor work areas; Bars and cocktail lounges; Indoor sporting events; Indoor concerts; Outdoor children's playgrounds and sports fields) (Note: No Hospitals)

- **Allowed in all areas**
- **Allowed in some areas**
- **Not allowed at all**

Supplement Questionnaire: May 2006, Aug. 2006, Jan. 2007

Current Population Survey: Feb., May and Aug. 2006; Tobacco Use Supplement File [Q #K6]

Supplement Questionnaire: May 2006, Aug. 2006, Jan. 2007

Current Population Survey: Jan. 2007; Tobacco Use Supplement File [Q #K6]

(Note: Same Supplement Questionnaire as 2006)

QUESTION 2**Which statement best describes the rules about smoking in your home?**

- No one is allowed to smoke
- Smoking is allowed in some places or at some times
- Smoking is permitted anywhere

Supplement Questionnaire: Sept. 1992

Current Population Survey: Sept. 1992; Tobacco Use Supplement File [Q #73]

Supplement Questionnaire: Jan. 1993

Current Population Survey: Jan. 1993; Tobacco Use Supplement File [Q #73]

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Sept. 1995; Tobacco Use Supplement File [Q #S73]

QUESTION 2**Which statement best describes the rules about smoking in your home?**

- No one is allowed to smoke
- Smoking is allowed in some places or at some times
- Smoking is permitted anywhere

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Jan. 1996, Tobacco Use Supplement File [Q #S73]

(Note: Same Supplement Questionnaire as Sept. 1995)

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Sept. 1998, Tobacco Use Supplement File [Q #S73]

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Jan. 1999, Tobacco Use Supplement File [Q #S73]

(Note: Same Supplement Questionnaire as Sept. 1998)

Supplement Questionnaire: June 2001, Nov. 2001 and Feb. 2002

Current Population Survey: June 2001, Nov. 2001 and Feb. 2002, Tobacco Use Supplement File [Q #S73]

(Worded slightly differently)

Supplement Questionnaire: Feb., June and Nov. 2003

Current Population Survey: Feb., June and Nov. 2003; Tobacco Use Supplement File [Q #K4]

Supplement Questionnaire: May 2006, Aug. 2006, Jan. 2007

Current Population Survey: Feb., May and Aug. 2006; Tobacco Use Supplement File [Q #K4]

Supplement Questionnaire: May 2006, Aug. 2006, Jan. 2007

Current Population Survey: Jan. 2007; Tobacco Use Supplement File [Q #K4]

(Note: Same Supplement Questionnaire as 2006)

QUESTION 3**Do you think smoking is a habit, an addiction, neither or both?**

- Habit
- Addiction
- Neither
- Both
- Don't know

Supplement Questionnaire: Sept. 1992

Current Population Survey: Sept. 1992; Tobacco Use Supplement File [Q #74]

Supplement Questionnaire: Jan. 1993

Current Population Survey: Jan. 1993; Tobacco Use Supplement File [Q #74]

QUESTION 4**In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community?**

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult
- Don't know

Supplement Questionnaire: Sept. 1992

Current Population Survey: Sept. 1992; Tobacco Use Supplement File [Q #75]

Supplement Questionnaire: Jan. 1993

Current Population Survey: Jan. 1993; Tobacco Use Supplement File [Q #75]

Note: "Don't Know" has been eliminated from here forward.

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Sept. 1995; Tobacco Use Supplement File [Q #S75]

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Jan. 1996; Tobacco Use Supplement File [Q #S75]

(Note: Same Supplement Questionnaire as Sept. 1995)

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Sep. 1998; Tobacco Use Supplement File [Q #S75]

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Jan. 1999; Tobacco Use Supplement File [Q #S75]

(Note: Same Supplement Questionnaire as Sept. 1998)

Supplement Questionnaire: June 2001, Nov. 2001 and February 2002

Current Population Survey: June 2001, Nov. 2001 and Feb. 2002; Tobacco Use Supplement File [Q #S75]

QUESTION 5**Do you think that giving away free samples by tobacco companies should be: always allowed, allowed under some conditions, or not allowed at all?**

- Always allowed
- Allowed under some conditions
- Not allowed at all
- Don't know

Supplement Questionnaire: Sept. 1992

Current Population Survey: Sept. 1992; Tobacco Use Supplement File [Q #76]

Supplement Questionnaire: Jan. 1993

Current Population Survey: Jan. 1993; Tobacco Use Supplement File [Q #76]

Note: "Don't Know" has been eliminated from here forward.

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Sept. 1995; Tobacco Use Supplement File [Q #S76]

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Jan. 1996; Tobacco Use Supplement File [Q #S76]

(Note: Same Supplement Questionnaire as Sept. 1995)

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Sept. 1998; Tobacco Use Supplement File [Q #S76]

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: January 1999; Tobacco Use Supplement File) [Q #S76]

(Note: Same Supplement Questionnaire as Sept. 1998)

QUESTION 6

Do you think advertising of tobacco products should be: always allowed, allowed under some conditions, or not allowed at all?

- Always allowed
- Allowed under some conditions
- Not allowed at all
- Don't know

Supplement Questionnaire: Sept. 1992

Current Population Survey: Sept. 1992; Tobacco Use Supplement File **[Q #77]**

Supplement Questionnaire: Jan. 1993

Current Population Survey: Jan. 1993; Tobacco Use Supplement File **[Q #77]**

Note: "Don't Know" has been eliminated from here forward.

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Sept. 1995; Tobacco Use Supplement File **[Q #S77]**

Supplement Questionnaire: Sept. 1995, Jan. 1996, May 1996

Current Population Survey: Jan. 1996; Tobacco Use Supplement File **[Q #S77]**

(Note: Same Supplement Questionnaire as Sept. 1995)

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Sept. 1998; Tobacco Use Supplement File **[Q #S77]**

Supplement Questionnaire: Sept. 1998, Jan. 1999, May 1999

Current Population Survey: Jan. 1999; Tobacco Use Supplement File **[Q #S77]**

(Note: Same Supplement Questionnaire as Sept. 1998)

Supplement Questionnaire: June 2001, Nov. 2001, Feb. 2002

Current Population Survey: June 2001, Nov. 2001 and Feb. 2002; Tobacco Use Supplement File **[Q #S77]**

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